

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

<i>In re</i> Application:)	Title:Method and Apparatus for
Jain <i>et al.</i>)	Congestion Control in a Wireless
)	Communication System
Application No: 09/877,820)	
)	Confirmation No.: 1176
Filed: June 7, 2001)	
)	Examiner: Lee, Andrew Chung Cheung
Attorney Docket No.: 010296)	
)	Group Art Unit: 2419

AMENDMENT

Mail Stop Amendment
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Sir:

In response to the Notice of Allowance dated July 26, 2010, please amend the above-identified application as set forth below. A Request for Continued Examination (RCE) transmittal accompanies the amendment.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 7 of this paper.

PENDING CLAIMS AS AMENDED

The listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3. (Canceled)

4. (Currently Amended) A method to determine a next data rate in a mobile station of a wireless system, comprising:
receiving a congestion indicator from a base station, the congestion indicator includes at least one data bit; and
generating the next data rate in the mobile station as a function of the data rate history and the history of the congestion indicator of the mobile station. ~~The method of claim 1, wherein~~ generating the next data rate further ~~comprises:~~ comprising counting a number of consecutive same value congestion indicators~~[[:]~~, and if the number of consecutive same value congestion indicators is less than a predetermined maximum number, determining the next data rate by maintaining the at least one previous data rate.

5. (Previously Presented) The method as in claim 4, wherein generating the next data rate further comprises:

if the number of consecutive same value congestion indicators is equal to or greater than the maximum number, determining the next data rate by adjusting the at least one previous data rate.

6. (Previously Presented) The method as in claim 5, wherein for a first congestion condition if the previous data rate is greater than the target data rate, adjusting comprises decreasing.

7. (Previously Presented) The method as in claim 6, wherein for a second congestion condition if the previous data rate is less than the target data rate, adjusting comprises increasing.

Claims 8-14. (Canceled)

15. (Currently Amended) A mobile station apparatus, comprising:
means for receiving a congestion indicator and determining a congestion condition
therefrom, the congestion indicator being received from a base station and includes at least one
data bit; and

means for determining a next data rate for the mobile station as a function of the history
of the congestion indicator and the data rate history of the mobile station;

~~The apparatus as in claim 13, further comprising:~~

~~counting~~ means for counting a number of consecutive same value congestion indicators[[,]]:

wherein the ~~data-rate-control~~ means for determining the next data rate generates the next data rate by maintaining the previous data rate in response to a second result of comparing the previous data rate to ~~[[the]]~~ a target data rate when the number of consecutive same value control indicators is less than a maximum number.

16. (Currently Amended) The apparatus as in claim 15, wherein the ~~data-rate-control~~ means for determining the next data rate generates the next data rate by adjusting the previous data rate when the number of consecutive same value control indicators is equal to or greater than the maximum number.

Claims 17 and 18. (Canceled)

19. (Currently Amended) An apparatus for determining a next data rate of an access terminal, comprising:

a receive circuit for receiving a congestion indicator having at least one data bit from an access network;

a data rate adjustment circuit coupled to the receive circuit, the data rate adjustment circuit being configured to generate the next data rate in the access terminal as a function of the data rate history and the history of the congestion indicator of the access terminal;

a comparator configured to compare a previous data rate to a target data rate for the access terminal, the comparator being coupled to the data rate adjustment circuit, wherein the data rate adjustment circuit being configured to generate the next data rate by adjusting the previous data rate in response to a result of comparing the previous data rate to a target rate; and

~~The apparatus as in claim 18 further comprising~~ a counter configured to count the number of consecutive same value congestion indicators, wherein the data rate adjustment circuit being configured to generate the next data rate by maintaining the previous data rate in response to the result of comparing the previous data rate to the target rate when the number of consecutive same value congestion indicators is less than a predetermined number.

20. (Previously Presented) The apparatus as in claim 19 wherein the data rate adjustment circuit being configured to generate the next data rate by adjusting the previous data rate when the number of consecutive same value congestion indicators is equal to or greater than the predetermined number.

21. (New) An apparatus in a mobile station, comprising:

means for receiving a congestion indicator from a base station, the congestion indicator includes at least one data bit; and

means for generating the next data rate in the mobile station as a function of the data rate history and the history of the congestion indicator of the mobile station, wherein the means for generating the next data rate further comprising means for counting a number of consecutive same value congestion indicators, and if the number of consecutive same value congestion

indicators is less than a predetermined maximum number, the means of generating the next data rate determines the next data rate by maintaining the at least one previous data rate.

22. (New) The apparatus as in claim 21 wherein if the number of consecutive same value congestion indicators is equal to or greater than the maximum number, the means for generating the next data rate further comprising determining the next data rate by adjusting the at least one previous data rate.

23. (New) The apparatus as in claim 22 wherein for a first congestion condition if the previous data rate is greater than the target data rate, the means for generating the next data rate further comprising determining the next data rate by decreasing the at least one previous data rate.

24. (New) The apparatus as in claim 23, wherein for a second congestion condition if the previous data rate is less than the target data rate, the means for generating the next data rate further comprising determining the next data rate by increasing the at least one previous data rate.

REMARKS

In response to the aforementioned Notice of Allowance, Applicants elect to file a Request for Continued Examination pursuant to 37 C.F.R. § 1.114(a)(1).

After the decision by the Board of Patent Appeals and Interferences (BAPI), the rejection of claims 1-3, 8-10, 13, 14, 17 and 18 are affirmed. The rejection of claims 4-7, 15, 16, 19 and 29 are reversed. In the Notice of Allowance dated July 26, 2010, claims are amended by the Examiner via an Examiner's Amendment in accord with the BAPI decision.

Applicants basically agree with the Examiner's Amendment but with some editorial changes. Furthermore, new claims 21-24 have been added. New claims 21-24 are apparatus claims in means-plus-function form corresponding to method claims 4-7. New claims 21-24 are submitted to be patentable for the same reasons claims 4-7 are patentable. No new matter has been added. Entry and allowance of Applicants' amendment with new claims 21-24 are respectfully requested.

Accompanying with this amendment, Applicants submit an Information Disclosure Document (IDS). Entry and consideration of the references listed in the IDS are also respectfully requested.

In view of the foregoing, Applicants believe the application is in condition for allowance. Reconsideration and an early allowance are respectfully requested.

Please charge any fees or deposit any overpayments that may be associated with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Date: October 18, 2010

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